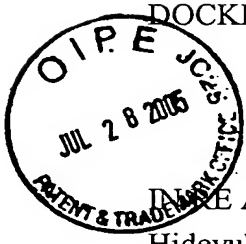


IPW



DOCKET NO.: 248040US0CONT/ims

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF:

Hideyuki TAKAHASHI, et al.

SERIAL NO: 10/766,940

GROUP: 1713

FILED: January 30, 2004

EXAMINER: H. L. PEZZUTO

FOR: STAIN-PROOFING AGENTS, COATING COMPOSITIONS COMPRISING  
THE STAIN-PROOFING AGENTS AND COATED ARTICLES

**LETTER**

Mail Stop DD  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith is a People's Republic of China Office Action for the Examiner's consideration. The reference cited therein has been previously filed on January 30, 2004.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,  
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Registration No. 48,082

**THE PATENT OFFICE OF THE STATE INTELLECTUAL PROPERTY OFFICE  
OF THE PEOPLE'S REPUBLIC OF CHINA**

Address: No. 6 Xi Tucheng Lu, Jiemeng Qiao Haidian District, Beijing Post code: 100088 P.O. BOX: Beijing 8020

**Shanghai Patent & Trademark Law Office**

Date of Dispatch  
April 29, 2005

Application No.: 02814991.2	Applicant: ASAHI GLASS COMPANY, LIMITED
Application Date: July 31, 2002	Agent:
Title: STAINPROOFING AGENTS, COATING COMPOSITIONS CONTAINING THE SAME AND COATED ARTICLES	

**THE FIRST OFFICE ACTION  
(PCT APPLICATION IN THE NATIONAL PHASE)**

1. ☒ According to the Request for Substantive Examination raised by the applicant and based on the provision of Item 1, Article 35 of the Patent Law, the Examiner has proceeded with the Examination as to Substance on the above mentioned application for patent for invention.  
☐ According to Item 2, Article 35 of the Chinese Patent Law, the Patent Office has decided to examine the above application for patent for invention.
  
2. ☒ The applicant has requested that the filling date of  
JP at the 2001.07.31 Patent Office as the priority date,  
JP at the 2001.08.10 Patent Office as the priority date,  
\_\_\_\_\_ at the \_\_\_\_\_ Patent Office as the priority date,
  
3. ☐ The following amended documents submitted by the applicant cannot be accepted for not conforming to the provision of Article 33 of the Patent Law:  
☐ The Chinese version of the attachment of the International Preliminary Examination Report.  
☐ The Chinese version of the amended document submitted according to the provision of Rule 19 of the Patent Cooperation Treaty.  
☐ The amended document submitted according to the provision of Rule 28 or Rule 41 of the Patent Cooperation Treaty.  
☐ The amended document submitted according to the provision of Rule 51 of the Implementing Regulations of the Patent Law.  
Refer to the text of the notice for the specific reason of non-acceptance thereof.
  
4. ☐ The examination is conducted by directing at the Chinese version of the original International Application submitted.  
☒ The examination is conducted by directing at the following application documents:  
☒ **Description,**  
p. 1-27.29-40, the Chinese version of the original International Application Document submitted;  
p. \_\_\_\_\_, the Chinese version of the attachment of the International Preliminary Examination Report;  
p. 28, the amended document submitted according to the provision of Rule 28 or Rule 41 of the

Patent Cooperation Treaty.

- p. \_\_\_\_\_, the amended document submitted according to the provision of Rule 51 of the Implementing Regulations of the Patent Law.

☒ **Claims,**

1-10, the Chinese version of the original International Application Document submitted.

\_\_\_\_\_, the Chinese version of the amended document submitted according to the provision of Rule 19 of the Patent Cooperation Treaty.

\_\_\_\_\_, the Chinese version of the attachment of the International Preliminary Report.

\_\_\_\_\_, the amended document submitted according to the provision of Rule 28 or Rule 41 of the Patent Cooperation Treaty.

\_\_\_\_\_, the amended document submitted according to the provision of Rule 51 of the Implementing Regulations of the Patent Law.

☐ **Attached Drawings,**

p. \_\_\_\_\_, the Chinese version of the original International Application Document submitted.

p. \_\_\_\_\_, the Chinese version of the attachment of the International Preliminary Examination Report.

p. \_\_\_\_\_, the amended document submitted according to the provision of Rule 28 or Rule 41 of the Patent Cooperation Treaty.

p. \_\_\_\_\_, the amended document submitted according to the provision of Rule 51 of the Implementing Regulations of the Patent Law.

5. ☒ This Notice cites the following Comparison Document(the number of which shall continue to be used in the subsequent examination proceedings):

No.	Number/Title of Document	Date of Publication (or the filing date of the conflicting Application)
1	JP 8-41416A	1996.02.13
2		
3		
4		

du/Apppl.

6. The conclusive opinion drawn from the examination:

☒ **As regards the Specification:**

☐ The contents of the application fall under the scope stipulated by Article 5 of the Patent Law for which no patent right should be granted.

☒ The specification does not conform with the provision of Item 3, Article 26 of the Patent Law.

☐ The drafting of the specification does not conform with the provision of Rule 18 of the Implementing Regulations.

☒ **As regards the Claims:**

☒ Claim 1,3,6 does not possess the novelty as stipulated in Item 2, Article 22 of the Patent Law.

☒ Claim 2,7-10 does not possess the inventiveness as stipulated in Item 3, Article 22 of the Patent Law.

☐ Claim \_\_\_\_\_ does not possess the practical applicability as stipulated in Item 4, Article 22 of the Patent Law.

☐ Claim \_\_\_\_\_ falls under the scope of Article 25 of the Patent Law where no patent right is to be granted.

- ☒ Claim 2 does not conform with the provision of Item 4, Article 26 of the Patent Law.
- ☐ Claim \_\_\_\_ does not conform with the provision of Item 1, Article 31 of the Patent Law.
- ☐ Claim \_\_\_\_ does not conform with the provision of Item 1, Rule 13 of the Implementing Regulations of the Patent Law.
- ☐ Claim \_\_\_\_ does not conform with the provision of Rule 18 of the Implementing Regulations of the Patent Law.
- ☒ Claim 1.2.5.6 does not conform with the provisions of Rules 20 to 23 of the Implementing Regulations of the Patent Law.

Refer to the text of this Notice for the specific analyses of the conclusive opinion.

7. Based on the above conclusive opinion, the Examiner deems that:
  - ☐ The applicant shall amend the application documents in accordance with the requirements raised in the text of the Notice.
  - ☒ The applicant shall discuss in his observations reasons why this application for patent can be granted a patent right, and amend the portions indicated in the text of the Notice which have been deemed as not conforming with the provisions, or no patent right shall be granted.
  - ☐ There are no substantive contents in the application for patent that can be granted a patent right. If the applicant does not present reasons or the reasons presented are not sufficient, the application shall be rejected.
8. The applicant is asked to note the following items:
  - (1) According to the provision of Article 37 of the Patent Law, the applicant shall submit his observations within four months from the receipt of this Notice. Where, without justified reasons, the applicant does not respond at the expiration of said date, the application shall be deemed to have been withdrawn.
  - (2) The applicant shall amend his application according to Article 33 of the Patent Law. The amended documents shall be in duplicate, and the form, in conformity with the relevant provisions in the Examination Guide.
  - (3) The applicant and/or his agent can not, without first making an appointment, go to the Patent Office to have an interview with the Examiner.
  - (4) The observations and/or the amended documents shall be mailed or delivered to the Department of Receipt, the Patent Office of the State Intellectual Property Office. No documents shall possess legal effects if not mailed or delivered to the Department of Receipt.
9. The text of this Notice totals 3 page(s), and includes the following attachment(s):
  - ☒ duplicate copy(ies) of cited comparison document(s), altogether 1 copy(ies) 6 pages.
  - ☐

Examination Department: \_\_\_\_\_ Examiner(Seal):

PCT171

### The Text of the First Office Action

The present application relates to stainproofing agents, coating compositions containing the same and coated articles. Upon examination, the Examiner remarks as follows:

1. Claim 1 does not comply with the provision on novelty of Article 22(2) of the Patent Law

Reference D1 (JP8-41416A) discloses a fluororesin coating composition for stainproofing comprising fluoro-copolymer (A) obtained by copolymerizing 40-65 mol% of chlorotrifluoroethylene, 14-50 mol% of a vinyl compound, 16-28 mol% of a hydroxyl-containing polymerizable compound and 0.1-3 mol% of a carboxyl-containing polymerizable compound and a polyether-modified silicone oil (B) containing a dimethylsiloxane structural unit and a ethylene oxide structural unit in a molecule. See claim 1 of D1. A fluoro-copolymer obtained by copolymerizing chlorotrifluoroethylene, vinyl acetate, vinyl ether, ethylene glycol monoallyl ether, glycerin monoallyl ether, undecylenic acid is disclosed in the *Examples* of the specification of D1 wherein the content of glycerin monoallyl ether (containing two hydroxyl repeating units) is more than 10% in Examples 3, 5 and 6, and the corresponding molecular weights are 6000, 12000 and 8000, respectively. For details, see table 1 of the specification of D1. Therefore, D1 differs from claim 1 only in doing not to refer to the copolymer A as a stainproofing agent. However, it is mentioned a few times in D1 that the coating of D1 has excellent stainproofing property. Even if the stainproofing property is achieved by jointly using polymers A and B in D1, the copolymer A of D1 should also be the same, in nature, as the copolymer in the applicant's claim 1. D1 thus has disclosed all the technical features of claim 1, and produces the same stainproofing effects. Claim 1 is thus not novel.

2. The fluoro-copolymer of D1 comprises undecylenic acid as monomer, the carboxyl group of which is just the crosslinkable functional group of the applicant's claim 3. In view of claim 1 being not novel, claim 3 is not, either.

3. Claim 6 further defines the physical property of the

composition of claim 1, rather than the structure or the constitution thereof. However, the physical property can not distinguish the applicant's composition from those of the prior art. Claim 6 thus also lacks novelty.

4. D1 differs from claims 7 and 8 in that a fluororesin having excellent weatherproof property and a hydroxyl-containing compound having stainproof property are combined to form a stainproofing polymer containing both fluorine atoms and hydroxyl group in D1 whereas two polymers, i.e., a fluororesin and a hydroxyl-containing polymer having stainproofing property, are separately used in claim 7 and claim 8. However, it is a conventional technique in the polymer field to induce a multifunctional group onto a carrier, i.e., a polymer. Claims 7 and 8 are thus not inventive.

5. It is a conventional technique to add a crosslinking agent into a coating composition. Claim 9 is thus not inventive.

6. Claim 10 recites a use of the coating. However, the coating has been disclosed in D1. Further, D1 also discloses a coated article obtained by applying a coating onto an aluminum substrate. Claim 10 thus does not involve an inventive step.

7. Claim 2 does not comply with the provision on inventive step of Article 22(3) of the Patent Law

D1 discloses in Example 6 a fluoro-copolymer obtained by copolymerizing chlorotrifluoroethylene, vinyl acetate, vinyl ether, ethylene glycol monoallyl ether, glycerin monoallyl ether, undecylenic acid and the total content of ethylene glycol monoallyl ether and glycerin monoallyl ether is 30 mol%, the molecular weight is 8000. Claim 2 defines that the stainproofing agent has a repeating unit containing a hydroxymethyl group, but fails to show the skeletal structure of the repeating unit. Under such a circumstance, there are no substantial differences between the limitation that a hydroxymethyl group is contained and the limitation that a hydroxyl group is contained. On the other hand, ethylene glycol monoallyl ether and glycerin monoallyl ether can be considered as each containing a hydroxymethyl group [sic]. Claim 2 is thus not inventive.

There are other issues in the application.

8. Claim 2 does not comply with the provision on support of Article 26(4) of the Patent Law

The wording "a repeating unit having a hydroxymethyl group" in claim 2 comprises a broad scope whereas only N-methylol acrylamide is illustrated in the specification. The disclosure in the specification does not enable one skilled in the art to expect that the "repeating unit having a hydroxymethyl group" other than those illustrated in the Examples are all applicable in the present invention. Claim 2 is thus objected for lacking sufficient support.

9. There are multiple dependency issues in claims 5 and 6.

10. The brackets in claims 1 and 2 should be deleted.

11. The specification describes 31 synthetic examples of the stainproofing agent and all the agents have a weight average molecular weight of 5000. However, the specification neither discloses any spectra from which the average molecular weight is calculated nor discloses the molecular weight distribution, the arrangement of the repeating units, etc. One skilled in the art is thus unable to determine the high molecular compound. Since the entire specific embodiments appear to be untrue, the applicant is requested to provide persuasive reasons to obviate the above doubtful points. Otherwise, the application will be rejected under the enabling requirement of Article 26(3) of the Patent Law.

The applicant shall submit its Observation in response to every item raised above in due time, and amend the application documents if necessary. Otherwise, the application will not be granted a patent right. Please note that according to Article 33, any amendments to the application documents may not extend beyond the contents of the application as originally filed.

The Examiner: WU, Hongxiu

Code: 8712

### SPTL's Comments

Upon reviewing the office action, we provide our brief comments relating to the items raised by the Examiner as follows:

1. We note that D1 relied on by the Chinese Examiner was also cited in the ISR and IPER of this PCT application as a reference detrimental to the novelty and the inventive step of claim 1. We are sure that the applicant had thoroughly studied D1 prior to entering the application into Chinese national phase and would know well as to how to obviate the Examiner's objection. Should we are of further assistance in this matter, please do not hesitate to contact us.

2-3. Claims 3 and 6 are dependent from claim 1, and should thus also be novel in the event that claim 1 is.

4-6. The technical solutions of claims 6-10 are characterized in using the stainproofing agent of claim 1, and should also be inventive in the event that claim 1 is.

7. Claim 2 actually further defines the repeating unit (A1) of claim 1, and should be dependent from claim 1 under the examination practice here. Claim 2 should thus also be inventive in the event that claim 1 is.

8. The Examiner's remark is reasonable to some extent in the examination practice here. As you may know, Examiners of the CPO are usually stricter in the support requirements than those of most developed countries. To expedite the examination, it is proposed to further limit the "a repeating unit having a hydroxymethyl group" in claim 2 to N-methylol acrylamide as required by the Examiner, provided that such amendment would not practically affect the applicant's interests.

9-10. These matters can be handled at our end.

11. As described in the last paragraph of page 31 of the Japanese language specification, the weight average molecular weights of the polymers of the present invention are obtained by gel permeation chromatography in which polystyrene is used as the standard. Since GPC is a conventional technique, it is not absolutely necessary to detailedly describe how to determine the weight average molecular weights of the polymers of the present invention. However, the Examiner





CN Appl. No.: 02814991.2

wonders why the polymers prepared in Synthetic Examples 1 to 31 all have the weight average molecular weights of 5000. The applicant's explanation is respectfully requested.

We look forward to receiving your instructions in due course concerning arguments and/or claims amendments which you wish us to put forward in the response to this Office Action. Should you have any questions or need additional information, please do not hesitate to contact us.



# 中华人民共和国国家知识产权局

邮政编码: 200233 上海桂平路 435 号 上海专利商标事务所有限公司 胡烨	发文日期 
申请号: 028149912 	
申请人: 旭硝子株式会社	
发明创造名称: 防污染剂、含该防污染剂的涂料用组合物以及涂装物品	

## 第一次审查意见通知书

(进入国家阶段的 PCT 申请)

1. ☒ 应申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 国家知识产权局对上述发明专利申请进行实质审查。  
☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局专利局决定自行对上述发明专利申请进行审查。
2. ☒ 申请人要求以其在:

JP 专利局的申请日 2001 年 07 月 31 日为优先权日,  
JP 专利局的申请日 2001 年 08 月 10 日为优先权日,  
专利局的申请日 年 月 日为优先权日。

3. ☐ 申请人于 年 月 日提交的修改文件, 不符合专利法实施细则第 51 条的规定。

☐ 申请人提交的下列修改文件不符合专利法第 33 条的规定。

- ☐ 国际初步审查报告附件的中文译文。  
☐ 依据专利合作条约第 19 条规定所提交的修改文件的中文译文。  
☐ 依据专利合作条约第 28 条或 41 条规定所提交的修改文件。  
☐

4. ☐ 审查是针对原始提交的国际申请的中文译文进行的。

☒ 审查是针对下述申请文件进行的:

☒ 说明书 第 1-27, 29-40 页, 按照原始提交的国际申请文件的中文译文;  
第 页, 按照国际初步审查报告附件的中文译文;  
第 28 页, 按照依据专利合作条约第 28 条或 41 条规定所提交的修改文件;  
第 页, 按照依据专利法实施细则第 51 条规定所提交的修改文件。

☐

☒ 权利要求 第 1-10 项, 按照原始提交的国际申请文件的中文译文;  
第 项, 按照依据专利合作条约第 19 条规定所提交的修改文件的中文译文。  
第 项, 按照国际初步审查报告附件的中文译文;  
第 项, 按照依据专利合作条约第 28 条或 41 条所提交的修改文件;  
第 项, 按照依据专利法实施细则第 51 条规定所提交的修改文件。

☐

☐ 附图 第 页, 按照原始提出的国际申请文件的中文译文;  
第 页, 按照国际初步审查报告附件的中文译文;  
第 页, 按照依据专利合作条约第 28 条或 41 条所提交的修改文件;  
第 页, 按照依据专利法实施细则第 51 条规定所提交的修改文件。



☒ 本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):

编号

文件号或名称

公开日期 (或抵触申请的申请日)

1

JP8-41416A

1996-2-13

5. 审查的结论性意见:

☒ 关于说明书:

- ☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。
- ☒ 说明书不符合专利法第 26 条第 3 款的规定。
- ☐ 说明书不符合专利法第 33 条的规定。
- ☐ 说明书的撰写不符合专利法实施细则第 18 条的规定。

☒ 关于权利要求书:

- ☒ 权利要求 1, 3, 6 不具备专利法第 22 条第 2 款规定的新颖性。
- ☒ 权利要求 2, 7-10 不具备专利法第 22 条第 3 款规定的创造性。
- ☐ 权利要求 不具备专利法第 22 条第 4 款规定的实用性。
- ☐ 权利要求 属于专利法第 25 条规定的不授予专利权的范围。
- ☒ 权利要求 2 不符合专利法第 26 条第 4 款的规定。
- ☐ 权利要求 不符合专利法第 31 条第 1 款的规定。
- ☐ 权利要求 不符合专利法第 33 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 13 条第 1 款的规定。
- ☐ 权利要求 不符合专利法实施细则第 2 条第 1 款关于发明的定义。
- ☒ 权利要求 1, 2 不符合专利法实施细则第 20 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 21 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 22 条的规定。
- ☒ 权利要求 5, 6 不符合专利法实施细则第 23 条的规定。

上述结论性意见的具体分析见本通知书的正文部分。

6. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。
- ☒ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。
- ☐ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

7. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的肆个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
- (2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
- (3) 申请人的意见陈述书和 / 或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
- (4) 未经预约, 申请人和 / 或代理人不得前来国家知识产权局专利局与审查员举行会晤。

8. 本通知书正文部分共有 3 页, 并附有下列附件:

- ☒ 引用的对比文件的复印件共 1 份 6 页。

审查员: 吴红秀 (8712)

2005 年 4 月 11 日



审查部门

化学发明审查部

21302  
2002.8



回函请寄: 100088 北京市海淀区蓟门桥西土城路 6 号 国家知识产权局专利局受理处收  
(注: 凡寄给审查员个人的信函不具有法律效力)

## 第一次审查意见通知书正文

申请号：028149912

本发明涉及一种防污剂以及用它制成的防污涂料，经审查，现提出如下的审查意见。

1权利要求1没有新颖性，不符合专利法22条第3款的规定。对比文件1（D1，JP8-41416A）公开了一种氟树脂防污涂料组合物，并具体公开了以下的技术特征：该涂料组合物包括由40-65mol%氯三氟乙烯、14-50mol%乙烯基化合物、16-28mol%含羟基的可聚合化合物、0.1-3mol%含羧基的可聚合化合物共聚得到的含氟共聚物A，以及分子中含有二甲基硅氧烷和环氧乙烷单元的聚醚改性的硅氧烷B（参见权利要求1），并且实施例中进一步具体说明了由氯三氟乙烯、醋酸乙烯酯、乙烯基醚、乙二醇单烯丙基醚、甘油单烯丙基醚、十一烯酸共聚得到的含氟共聚物，其中实施例3、5和6中甘油单烯丙基醚（含有两个羟基的重复单元）的含量超过10%，并且对应的分子量分别为6000、12000和8000（具体参见表1）。因此权利要求1与D1的区别仅在于，D1没有将聚合物A叫做防污剂，但是D1中多处指出，该涂料防污性能优异，并且即使D1中的防污性能是由于聚合物A和B共同实现的，D1中的聚合物A也是与权利要求1本质相同的聚合物，因此D1公开了权利要求1的全部技术方案，并且它们属于相同的技术内容，能够得到相同的防污效果，因此权利要求1没有新颖性。

2权利要求3没有新颖性，不符合专利法22条第2款的规定。D1中的含氟共聚物中包括单体十一碳烯酸，它所含有的羧基就是一种具有交联性的官能团，因此当权利要求3引用权利要求1时，不具备专利法22条第2款所述的新颖性。

3权利要求6中进一步对该防污聚合物的物理性能进一步作出了限定，但是并没有对所述的防污聚合物在结构或其组成上作出进一步的限定，也就是说，该防污聚合物依然是权利要求1或3的聚合物，因此根据审查指南2-164 5.3中的规定，当无法将用物理化学参数表征的产品权利要求与现有技术产品进行区分时，则用该物理化学参数表征的产品权利要求不具备专利法22条第2款所述新颖性的规定。

4权利要求7-8没有创造性，不符合专利法22条第3款的规定。D1与权利要求7-8的区别在于，D1中将氟树脂优异的耐气候性和耐化学性与含羟基的防污性合二为一，形成了一种既含有氟又含有羟基的防污聚合物，而权利要求7和8是使用了两种聚合物即含氟树脂和含羟基防污聚合物，而在高分子领域，将实现多种功能的官能团引入到一种载体即一种聚合物上是本领域公知常识，因此在D1的技术上结合上述公知常识得出权利要求7和8的技术方案对于本领域技术人员来说是显而易见的，因此权利要求7和8不具备突出的实质性特点和显著的进步，因此没有创造性。

5在涂料组合物中混入交联剂是本领域公知常识，因此权利要求9不具备突出的

实质性特点和显著的进步，因此不具备专利法22条第3款所述的创造性。

6权利要求10不具备专利法22条第3款有关创造性的规定。权利要求10是涂料的一种具体应用，而该涂料已经被D1所公开，并且D1公开了一种将涂料涂覆到铝板上得到涂覆了涂层的铝板，因此权利要求10不具备创造性的规定。

7权利要求2没有创造性，不符合专利法22条第3款的规定。D的实施例6中公开了氯三氟乙烯、醋酸乙烯酯、乙烯基醚、乙二醇单烯丙基醚、甘油单烯丙基醚、十一烯酸共聚得到的含氟共聚物，并且乙二醇单烯丙基醚和甘油单烯丙基醚的总含量为30mol%，分子量为8000，虽然权利要求2中指出含有羟甲基的重复单元，但是在没有给出重复单元骨架结构的前提下，指出它含有羟甲基与说它含有羟基是没有本质区别的，反过来说，可以认为乙二醇单烯丙基醚和甘油单烯丙基醚中分别含有羟甲基，因此权利要求2不具备突出的实质性特点和显著的进步，因此没有创造性。

下面指出申请中存在的其它问题。

8权利要求2得不到说明书实质性支持，不符合专利法26条第4款的规定。权利要求2中使用的概念“具有羧甲基的重复单元”概括了太多的化合物，而依据本申请说明书所记载的内容，本申请只就用N-羟甲基丙烯酰胺进行了具体说明，因此依据本申请说明书所记载的内容，本申请说明书难以就上述概念所概括的除本申请实施例之外的所有方式都能够实施，并达到本发明的目的和效果，因此权利要求2得不到说明书的支持。

9权利要求5和6本身是多项从属权利要求，又引用了在前的多项从属权利要求，因此不符合实施细则23条第2款的规定。

10权利要求1和2中含有的括号会使权利要求的保护范围不清楚，不符合实施细则20条第1款的规定。应当将括号中的内容“以质量为准”放在括号外面，并去掉括号。

11说明书描述了31个防污染剂的合成例，但是其重均分子量全部为5000，而说明书中又没有具体公开谱图来说明这些重均分子量是如何得来的，并且说明书也没有公开分子量分布、重复单元排列状态等要素，因此本领域技术人员无法确认该高分子化合物，鉴于整个具体实施方案有不真实的嫌疑，因此如果申请人不能就上述疑点提出有说服性的理由，那么本申请说明书就没有对发明作出清楚、完整的描述，不符合专利法26条第3款的规定。

申请人应当在本通知书指定的答复期限内对本通知书提出的问题逐一进行答复，必要时应修改专利申请文件，否则本申请将难以获得批准。申请人对申请文件的修改应当符合专利法第三十三条的规定，不得超出原说明书和权利要求书记载的范围。

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